SITE HEALTH AND SAFETY PLAN

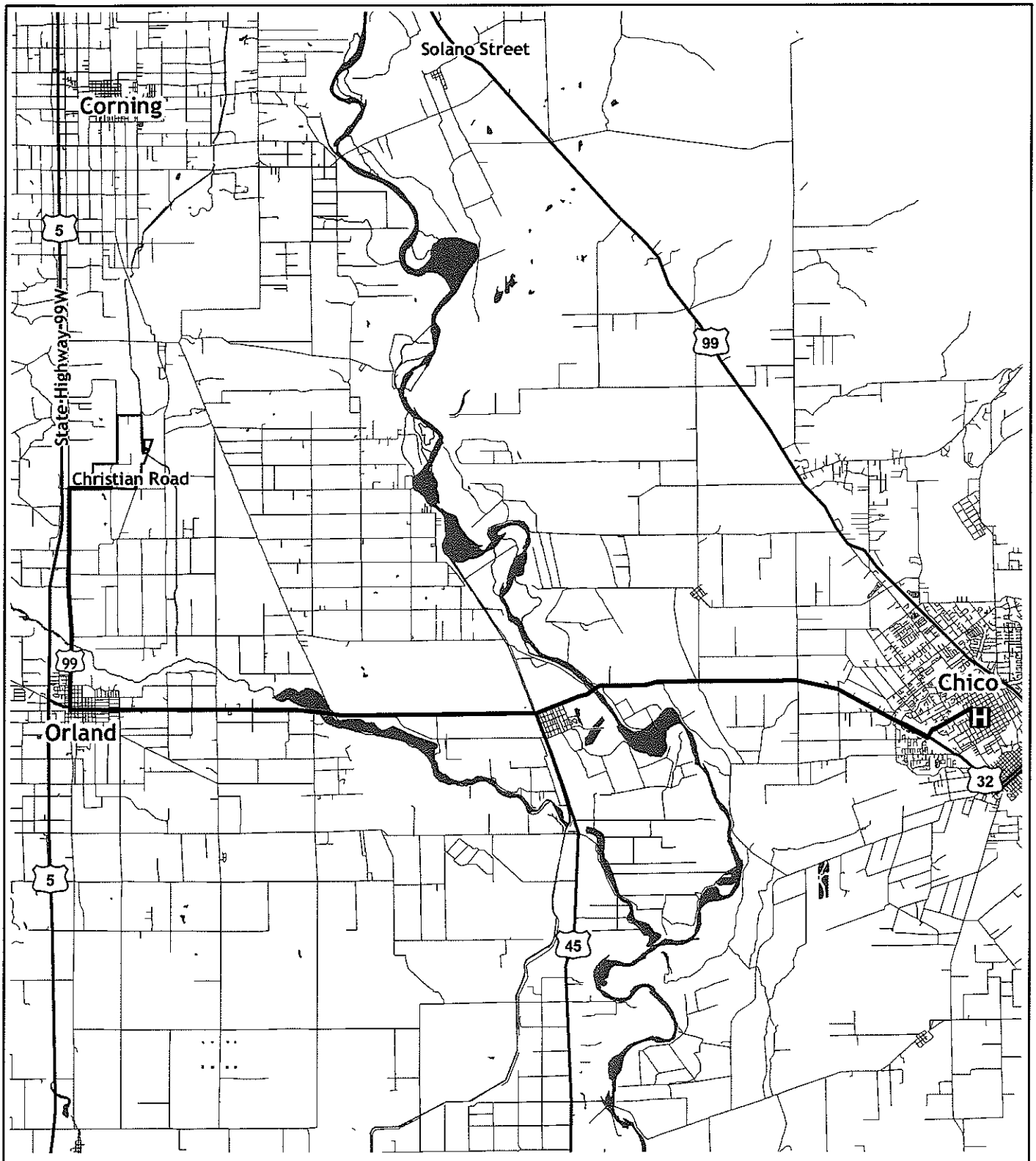
ALSTON FARMS DAIRY NO. 2
ORLAND, CALIFORNIA

ACTIVITIES ASSOCIATED WITH
MONITORING WELL INSTALLATION AND SAMPLING

Prepared by

VESTRA Resources, Inc.
5300 Aviation Drive
Redding, California 96002

OCTOBER 2008



Take Christian Road to State Highway 99W.
Turn left onto State Highway 99W.
Follow State Highway 99W to Highway 32/Walker Street.
Turn left onto Highway 32/Walker Street.
Take Highway 32 to Chico.
Turn left onto W 8th Ave.
Turn right onto Esplanade.
Enloe Hospital is located at 1531 Esplanade.

H Enloe Hospital

Alston Dairy Site Location

N

VESTRA

0 1 2 4 Miles

MAP TO ENLOE HOSPITAL
ALSTON DAIRY
TEHAMA COUNTY, CALIFORNIA

P:\GIS\70824\Figures\70824_EmergencyRouteToHospital.mxd

SITE HEALTH AND SAFETY PLAN
ALSTON FARMS DAIRY NO. 2, ORLAND CALIFORNIA

This plan must be kept onsite during all field activities and will be reviewed and updated as necessary. The plan shall be made available to any contractor or subcontractor or their representative who will be involved with any hazardous waste operation; to employees; to employee designated representatives; and to personnel of any Federal, state, or local agencies with regulatory authority over a given site.

SITE LOCATION

The site is located at 22954 Christian Road, Orland, California.

PROJECT ORGANIZATION

Technical Advisor/ Site Safety Officer	John Andrews	Office Cell	(530) 223-2585 (530) 949-4871
Field Coordinator/ Site Safety Supervisor (SSS)	Wendy Johnston	Office Cell	(530) 223-2585 (530) 949-9704
Geologist/Field Support	Lauren Andrews Clark Maki	Office	(530) 223-2585

EMERGENCY INFORMATION

IN THE EVENT OF A POTENTIAL LIFE-THREATENING EMERGENCY, CALL 911.

Hospital/ Clinic: Enloe Medical Center **Phone No.** (530) 332-7371

Hospital Address: 1531 Esplanade, Chico CA 95926

Paramedic: 911

Fire Dept: 911

Police Dept: 911

Hospital Directions:

A map from the site to the hospital is included.

EMERGENCY/CONTINGENCY PLAN

Coordinate evacuation procedures and remain a safe distance from the emergency. Perform First Aid/CPR as warranted by the situation. Do not move personnel with suspected neck or back injuries unless imminent danger to life exists. Report all injuries to the supervisor.

TASKS TO BE PERFORMED UNDER THIS PLAN

Personnel on all projects must meet the training requirements of 8 CCR 5192 (e). Eating, drinking, and smoking are not allowed while handling substances involved with the site. Long pants, boots, and safety vests are required at all times. The tasks listed below are a general overview of possible activities to be conducted on site.

The Project Manager and Site Safety Officer are responsible for implementation of this plan, which includes a daily site safety briefing prior to initiating any onsite work.

Site activities may include but are not limited to site characterization, construction, and remediation. This plan has been developed for VESTRA personnel; it is not intended for subcontractor or client use. Activities include but are not limited to:

- Monitoring Well Installation
- Monitoring Well Development
- Groundwater sample collection

Monitoring Well Installation

Oversight of monitoring well installation to monitor groundwater quality associated with additional ponds at the dairy. Heavy equipment related to drilling activities will be onsite.

Groundwater Sampling

Groundwater sampling activities may involve contact with contaminated water. Special attention must be given to assure proper Personal Protective Equipment (PPE) is worn as required. Please review the Physical, Biological, and Chemical Hazards sections.

TRAINING PROGRAM

All onsite employees will meet the medical surveillance, and training-hour annual refresher training requirements of OSHA 29CFR1910.120. Employees designated "SSC" have received 8 hours of supervisor and 8 hours of instrument training and can serve as site safety coordinator (SSC) for the level of protection indicated. There must be one SSC present during any task performed in exclusion or decontamination zones with the potential for exposure for safety and health hazards. Employees designated "FA-CPR" are currently certified by the American Red Cross, or equivalent, in first aid and CPR. There must be one FA-CPR designed employee present during any task performed in exclusion or decontamination zones with the potential for exposure to safety and health hazards. The "buddy system" requirements of OSHA 29CFR1910.120 are to be met at all times.

MEDICAL SURVEILLANCE PROGRAM

All employees in connection with field activities will have an entrance medical exam when employment period begins. All employees engaging in field activities associated with the tasks described above that may place them in contact with hazardous materials will have annual medical surveillance that reflects the exposure to chemicals encountered in the field. The medical surveillance may include respiratory, hearing, blood work, back x-ray, and tetanus booster if needed. Upon termination, employees have an exit exam.

All personnel medical records are available for review at any time and will be retained for 30 years after the date of personnel termination. Contact the human resources manager for VESTRA Resources, Inc. at (530) 223-2585.

STANDARD OPERATING PROCEDURES

Prohibitive Work Practices

- No spark sources within exclusion or decontamination zones
- Avoid visibly contaminated areas
- No eating, drinking, or smoking in contaminated areas, exclusion, or decontamination zones
- SSC to establish areas for eating, drinking, and smoking
- No contact lenses in exclusion or decontamination zones
- No facial hair that would interfere with respirator fit if Level B or C is anticipated

Site Control Measures

SSC will conduct site safety briefing (see below) before starting field activities or as tasks and site conditions change.

- SSC records safety-briefing attendance in logbook, and documents topics discussed.
- Post CAL/OSHA job site poster in a central and conspicuous location at the site.
- Establish work zones: support, decontamination and exclusion zones, and delineate work zones with flagging or cones as appropriate.
- Establish decontamination procedures, including respirator decontamination procedures, and test the procedures.
- Utilize access control at entry and exit from each work zone.
- Chemicals are to be stored in proper containers.
- Applicable Material Safety Data Sheets (MSDS) are to be available onsite.
- Establish onsite communications. These should consist of:
    - Line of sight/hand signals
    - Air horn
    - Two-way radio or cellular phone
- Establish emergency signals. For example:
    - Grasping throat with hand – EMERGENCY! HELP ME!
    - Grasping buddy's wrist – LEAVE AREA NOW!
    - Thumbs up – OK, UNDERSTOOD
    - Two short blasts on air horn – ALL CLEAR.
    - Continuous air horn – EMERGENCY! EVACUATE!
- Establish offsite communications.
- Establish procedures of disposal of material generated onsite.
- SSC to conduct periodic inspections of work practices to determine effectiveness of this plan. Deficiencies to be noted and corrected.

- Site safety briefing topics: general discussion of health and safety plan, site specific hazards, location of work zones, PPE requirements, equipment, special procedures, and emergencies.

- Site work will be performed during daylight hours whenever possible. Any work conducted during hours of darkness will require enough illumination intensity "to read a newspaper" without difficulty.

BIOLOGICAL HAZARDS

Hazards are inherently present during fieldwork when heavy equipment is present. It is important to always be aware of the threat hazards may pose. Being aware of your surroundings will help to avoid many of the potential hazards. The typical physical hazards anticipated being present at the site and the methods for preventing injury due to these hazards is described below.

Common physical hazards include mechanical hazards; slip-trip-fall hazards associated with the field environment; water hazards; biological hazards such as snakebites and ticks; hazards associated with weather conditions; and musculoskeletal injury resulting from lifting tasks.

BIOLOGICAL HAZARDS

HAZARD	CONTROL
TICK	Check for ticks often and thoroughly. If bitten remove by carefully grasping tick close to skin with tweezers and pulling straight out. Wash hands and bitten area thoroughly when removed. Disinfect affected area. If the tick resists or cannot be completely removed, seek medical attention.
	Lyme Disease or **Rocky Mountain Spotted Fever (RMSF)** may result from tick bite. **Lyme Disease**: Rash that looks like a "bullseye" with small welt in center, several days to weeks after tick bite. **RMSF**: Rash comprising red spots under skin, 3 to 10 days after tick bite. **Symptoms for both include** chills, fever, headache, fatigue, stiff neck, bone pain. IF SYMPTOMS APPEAR, SEEK MEDICAL ATTENTION IMMEDIATELY.
RATTLESNAKE	If bitten, do not cut victim. Elevate affected area and seek medical attention immediately. Notify medical authorities as soon as possible; it takes time to prepare anti-venom.

PHYSICAL HAZARDS

HAZARD	CONTROL
SAMPLING EQUIPMENT	Operation of sampling equipment during site activities presents potential physical hazards to personnel. During all site activities, personal protective equipment (PPE) such as steel-toed shoes, safety glasses or goggles, and hard hats should be worn whenever such equipment is present.
SLIP-TRIP-FALL	Slip-trip-fall hazards are common at field sites due to open holes; muddy, slippery, or unstable surfaces; and equipment on the ground. While it is difficult to eliminate all slip-trip-fall hazards, implementing safe work practices, utilizing proper footwear, and keeping the work area free of obstructions will minimize risk of injury.
LIFTING HAZARDS	Field operations often require the performance of laborious tasks. All employees must implement proper lifting procedures, such as keeping the load close to the body, and using leg muscles instead of back muscles to perform lifting tasks. Additionally, employees will not attempt to lift large, heavy, or awkwardly shaped objects without assistance.

WEATHER	Weather conditions are an important consideration in planning and conducting site operations. Extremely hot or cold weather conditions can cause physical discomfort, loss of efficiency and personal injury. Of particular importance at sites is heat stress, often resulting from the use of impermeable protective clothing, which decreases the body's natural cooling processes.

SYMPTOMS AND TREATMENT OF HEAT AND COLD STRESS

	Heat Related		Cold Related	
	Heat Exhaustion	**Heat Stroke (More Severe)**	**Hypothermia**	**Frostbite (More Severe)**
Symptom	Pale, clammy, moist skin; profuse sweating; weakness; normal temperature; dizzy; headache; vomiting.	Red, hot, dry skin; dizziness; confusion; rapid breathing and pulse; high body temperature.	Shivering, apathy, sleepiness; rapid drop in body temperature; glassy stare; slow pulse, slow respiration.	Blanched, white, waxy skin, but tissue resilient; tissue cold and pale.
Treatment	Get victim to cool place. Loosen clothing, place head in low position. Have victim drink cool (not cold) water. **GET MEDICAL ATTENTION!**	Cool victim rapidly by soaking in cool (not cold) water. **GET MEDICAL ATTENTION IMMEDIATELY!**	Remove victim to a warm place. Have victim drink warm fluids-not coffee or alcohol. **GET MEDICAL ATTENTION!**	Get victim to a warm place. Re-warm area quickly in warm (not hot) water. Have victim drink warm fluids-not hot coffee or alcohol. Do not break any blisters. Elevate the injured area **GET MEDICAL ATTENTION IMMEDIATELY!**

GUIDELINES FOR WORKING IN TEMPERATURE EXTREMES WHILE WEARING PPE (LEVEL C AND ABOVE)

TEMPERATURE	WORK CYCLE	REST CYCLE	CONTROL MEASURES
<32° F or <55° F & Raining	2 hrs	15 min	Review cold stress in safety meeting. Rest in a warm area. Drink at lest 8 ounces of warm non-caffeinated, non-alcoholic beverage at each rest break. Schedule a mid-day lunch break of at least 30 minutes in a warm area to begin not later than 5 hours after startup.
72° F to 77° F	2 hrs	5 min	Review heat stress in safety meeting. Take resting pulse rate before beginning work. Drink 8 ounces of cool water before beginning work, and 4 ounces at rest break. Have ice available.
77° F to 82° F	2 hrs	5 min	As above, but seated rest break. Monitor pulse rate. (See below)
82° F to 87° F	60 min	15 min	As above, with shaded rest area.
87° F to 90° F	30 min	15 min	As above, with shaded rest area.
>90° F	15 min	15 min	As above, with shaded rest area.

RADIOLOGICAL HAZARDS AND CONTROLS

HAZARD	CONTROL
NO EVIDENCE HAS BEEN DISCOVERED TO SUGGEST THAT A RADIATION HAZARD EXISTS ONSITE.	None

CHEMICAL HAZARDS AND CONTROLS

The Project Manager or Field Supervisor is to request Material Safety Data Sheets (MSDS) from suppliers for chemicals that VESTRA employees or subcontractors may be exposed to. MSDS will be stored in a readily accessible location for the duration of the project.

A table summarizing Potential Chemicals of Concern is included below: **NONE.**

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Respirators will be used if indicated by site conditions to minimize volatile and ambient air inorganic chemical exposure by inhalation, and in the case of full-face respirators to minimize exposure to the eyes. A full-face respirator provides a higher level of respiratory protection, as well as preventing vapor contact with the eyes. Organic cartridges will be used, and new cartridges will be installed daily at a minimum when used or as exposure and hours of use indicate. To prevent exposure to particulates (dust, mists, or fumes), and to extend the usability of the inorganic cartridges, dust and mist filters will be used if indicated by site conditions. Respirators, cartridges, and filters will be NIOSH approved.

Boots, protective clothing, and gloves prevent direct contact with potential contaminants in the soil, water and ambient air, and provide an easy method of personal decontamination. Splash goggles provide protection from possible liquid splashing in the eyes, and in the case of sealed goggles, limit the contact of the ambient air with the eyes.

All employees in the Work Zone will meet the minimum level of PPE when entering or working in an area of known contamination specific to the job task. If the level of contamination is unknown, the maximum level of PPE will be donned prior to entering the suspected contamination zone. Once appropriate site monitoring has been conducted to indicate the level of contamination, the level of PPE may be reduced, as appropriate. If known or suspected conditions require an increase in the level of PPE in the contamination zones or newly designated contamination zones, all operations will immediately cease until appropriate changes in PPE are made.

GENERAL SAFETY REQUIREMENTS

All persons entering and/or working in the immediate area of project activities shall follow the following general safety procedures:

1. All personnel involved with these activities shall be aware of the location of buried utilities. USA Underground Alert shall be notified, if required, at least 48 hours in advance of sampling and will mark and locate any underground utilities located within or immediately adjacent to the work area.

2. VESTRA personnel will not be allowed on site without the prior knowledge and consent of the SSS/SSO.

3. Field activities will not be conducted without sufficient VESTRA backup personnel, who currently satisfy the health and safety requirements specified in 29 CFR 1910.120 (e) must be present at the site while field activities are in progress.

4. All personnel involved in the project shall bring to the attention of the SSS/SSO or the project representative for VESTRA any unsafe condition or practice associated with site activities.

5. Team members must avoid unnecessary contamination (such as, walking through known or suspected "hot" zones or contaminated puddles, kneeling or sitting on the ground, leaning against potentially contaminated equipment).

6. Respiratory devices may not be worn with beards, or under other conditions that prevent a proper seal.

7. Respiratory devices may not be worn with contact lenses.

8. No deep test pit entry (more than 5 feet in depth) will be allowed without installation of trench shoring, or other approved means of excavation security designed and installed in conformance with current Cal OSHA/OSHA regulations.

9. Smoking will only be allowed in designated areas.

10. Hard hats will be worn within the designated work zone.

11. Proper hearing protection will be worn at all times in conformance with current Cal OSHA/OSHA regulations.

12. Proper eye protection will be worn to protect the eye area from liquid splashes or flying debris.